

**Amendments to the claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1. **(original)** A process for the preparation of a composition or a protein suitable for maintaining intact and/or restoring and/or increasing the number of cellular mitochondria, i.e., for modifying in a positive sense the activity of production of intracellular energy, characterized in that it envisages the use, as active ingredients, of the branched amino acid leucine, or a pharmaceutically acceptable derivative thereof, in combination with at least one between the branched amino acids isoleucine and valine, or pharmaceutically acceptable derivative thereof.
2. **(original)** The process according to claim 1, in which leucine, isoleucine, and valine, or pharmaceutically acceptable derivatives thereof, are used as active ingredients.
3. **(currently amended)** The process according to Claim 1 ~~or Claim 2~~, in which the ratio between the amount of isoleucine and the amount of leucine, or derivatives thereof, on molecular weight basis, is from 0.2 to 0.7, preferably from 0.4 to 0.6.
4. **(currently amended)** The process according to Claim 1 ~~or Claim 2~~, in which the ratio between the amount of valine and the amount leucine, or derivatives thereof, on molecular weight basis, is from 0.2 to 0.7, preferably from 0.4 to 0.6.
5. **(currently amended)** The process according to ~~at least one of the preceding claims~~ claim 1, in which at least one ~~between~~ of threonine and lysine, or a pharmaceutically acceptable derivative thereof, is envisaged as further active ingredient.
6. **(original)** The process according to Claim 5, in which the ratio between the amount of threonine and the amount of leucine, or derivatives thereof, on molecular weight basis, is from 0.15 to 0.50, preferably from 0.2 to 0.45.

7. **(original)** The process according to Claim 5, in which the ratio between the amount of lysine and the amount of leucine, or derivatives thereof, on molecular weight basis, is from 0.15 to 0.60, preferably from 0.3 to 0.55.
8. **(original)** The process according to Claim 5, in which threonine and lysine, or derivatives thereof, are both present as further active ingredients and the sum of their amounts is between 10% and 50%, preferably between 25% and 45%, of the sum of the amount of leucine, isoleucine and valine, or derivatives thereof, on molecular weight basis.
9. **(currently amended)** The process according to claim 1, in which there are envisaged, as further active ingredients, one or more essential amino acids, or pharmaceutically acceptable derivatives thereof, selected ~~in~~from the group consisting of histidine, methionine, phenylalanine, tryptophan.
10. **(original)** The process according to Claim 9, in which there are envisaged, as further active ingredients, histidine, methionine, phenylalanine, tryptophan, or pharmaceutically acceptable derivatives thereof.
11. **(original)** The process according to Claim 10, in which the sum of the amounts of histidine, methionine, phenylalanine, tryptophan, or derivatives thereof, is from 2% to 25%, preferably from 5% to 15%, of the sum of the amount of leucine, isoleucine, valine, threonine and lysine, or derivatives thereof, on molecular weight basis.
12. **(currently amended)** The process according to Claim 9, in which at least one ~~between~~of tyrosine and cyst(e)ine, or a pharmaceutically acceptable derivative thereof, is provided as further active ingredient.

13. **(currently amended)** The process according to Claims 9 ~~and 12~~ in which tyrosine, or derivative thereof, is in an amount from 15% to 50%, preferably from 20% to 35%, of the amount of phenylalanine, or derivative thereof, on molecular weight basis.
14. **(currently amended)** The process, according to Claims 9 ~~and 12~~, in which the amount of cyst(e)ine, or derivative thereof, is at least 100%, and preferably comprised between 150% and 350%, of the amount of methionine, or derivative thereof, on molecular weight basis.
15. **(original)** The process, according to Claim 12, in which one or more further amino acids, or pharmacologically acceptable derivatives thereof, are envisaged as active ingredients, the sum in gram molecular weight of which is a percentage lower than 20% with respect to the other active ingredients and/or less than 10% for each individual further amino acid, or derivative thereof.
16. **(currently amended)** The process according to ~~at least one of the preceding claims~~ claim 1, in which the sum of the individual amounts of threonine and lysine, or derivatives thereof, on molecular weight basis, is smaller than the sum of the individual amounts of the aforesaid branched amino acids, or derivatives thereof, but greater than the sum of the individual amounts of the other essential amino acids or derivatives thereof, envisaged in the composition.
17. **(currently amended)** The process according to ~~at least one of the preceding claims~~ claim 1, in which the amount of threonine, or derivatives thereof, on molecular weight basis, is smaller than the sum of the individual amounts of lysine and of the aforesaid branched amino acids, or derivatives thereof, but greater than the individual amounts of the other essential amino acids, or

derivatives thereof, envisaged in the composition.

18. **(currently amended)** The process according to ~~at least one of the preceding claims~~claim 1, in which the amount of lysine, or derivatives thereof, on molecular weight basis, is smaller than individual amounts of the aforesaid branched amino acids, or derivatives thereof, but greater than the individual amounts of the other essential amino acids, or derivatives thereof, envisaged in the composition.

19. **(currently amended)** The process according to ~~at least one of the preceding claims~~claim 1, in which the amount of threonine, or derivatives thereof, on molecular weight basis, is smaller than individual amounts of lysine and of the aforesaid branched amino acids, or derivatives thereof, but greater than the individual amounts of the other essential amino acids, or derivatives thereof, envisaged in the composition.

20. **(currently amended)** The process according to ~~at least one of the preceding claims~~claim 1, in which the amount of lysine, or derivatives thereof, on molecular weight basis, is smaller than individual amounts of the aforesaid branched amino acids, or derivatives thereof, but greater than the sum of the individual amounts of the other essential amino acids, or derivatives thereof, envisaged in the composition.

21. **(currently amended)** The process according to ~~at least one of the preceding claims~~claim 1, in which the composition has a pH in an aqueous solution comprised between 6.5 and 8.5, with or without excipients suitable for the preparation of tablets, capsules, powders, etc., in any pharmacological form of presentation suitable for enteral or parenteral use.

22-31. *(cancelled)*

32. *(new)* A method for the treatment of pathological conditions characterized by insufficient or reduced mitochondrial function, wherein the method comprises administering to a patient in need of such treatment a therapeutically effective amount of a composition suitable for maintaining intact and/or restoring and/or increasing the number of cellular mitochondria, wherein said composition comprises, as active ingredients, leucine, or a pharmaceutically acceptable derivative thereof, in combination with at least one of isoleucine and valine, or pharmaceutically acceptable derivatives thereof.